



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON DC

01 FEB 2001

MEMORANDUM FOR ALMAJCOM/XO/DO/SE/SC/CE

FROM: HQ USAF/XOO/ILE

SUBJECT: Air Force Airfield Obstruction Reduction Initiative

This memo establishes an official policy resulting from the recent Airfield Obstruction Reduction Initiative Report (AORI). The directives contained within this memorandum will be reinforced within the various AF Instructions and Manuals associated with airfield construction, maintenance, safety, and management disciplines within the next year. However, please do not wait for these publication updates to implement these policy changes. Implement the following measures immediately:

a. All airfield related maintenance, construction, and repair projects, including all plans and as-built drawings, must be coordinated with Airfield Management, Flying Safety, Communications, Community Planning and Engineering Design. This includes work generated by all entities. Document coordination as appropriate and retain with applicable facility records. Civil engineers will verify designs meet frangibility requirements.

b. Implement a Building Restriction Line (BRL) at each base and eliminate waivers for facilities that are beyond and beneath the boundaries of the BRL. Vacant land within this area may be further developed with facilities under airfield-related category codes without waiver. When establishing the BRL, exclude Clear Zones and objects that affect Terminal Approach and Departure Procedures (TERPS) criteria for the lowest level of instrument operations planned for the runway. Guidelines for establishing the BRL are attached.

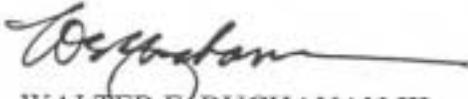
c. Perform an operational risk assessment and establish an operational risk management (ORM) ranking for the airfield. Wing safety office should lead this effort but will require input from the airfield operations flight and civil engineers. The ORM ranking will be used to provide a benchmark for evaluating future mission changes and further developing the facility.

d. Update your obstruction database files to reflect only those obstructions that remain after implementing the BRL. Provide the updated database files to HQ AFCEA by 30 Jun 01. Civil engineers should take the lead on this effort.

The cross-functional AORI Tiger Team, consisting of members from Civil Engineers, Safety, and Airfield Operations, and Communications, recommended these measures. They are intended to aid in preventing new obstructions, clarifying existing policy for exempt facilities, and eliminating mitigation issues for obstructions that are not practical or economically feasible.

to remove. These are but a few of the changes that resulted from the Chief of Staff's direction in this area to relieve the administrative burden associated with maintaining waivers for violations while ensuring compliance with frangibility requirements on and near the airfield.

POCs are Col Michael Cook, HQ AFCESA/CES, DSN 523-6342, e-mail Michael.Cook@Tyndall.af.mil, and Col Boice Hardy, HQ AFFSA/XA, DSN 857-4743, e-mail Boice.Hardy@Andrews.af.mil.



WALTER E. BUCHANAN III  
Major General, USAF  
Director of Operations and Training  
DCS, Air and Space



EARNEST O. ROBBINS II  
Major General, USAF  
The Civil Engineer  
DCS/Installations & Logistics

Attachment:  
Guidelines for BRL

cc:  
HQ AFCES/CC/CES  
HQ AFFSA/CC/XA/XAO  
HQ AFSC/CC

## **Guidelines for Establishing the Building Restriction Line (BRL) at USAF Bases**

1. General Information. The Building Restriction Line (BRL) is defined as "*A line which identifies suitable building area locations on airports.*" For civilian airports, it is described in Federal Aviation Administration (FAA) Advisory Circular 150/5300-13. For USAF installations, the BRL will have the same meaning; however, it will be established at a different location than at civilian airports. Generally, the distance from the runway centerline will be greater. However, in some cases, it may be slightly less than it would be if established in accordance with civil standards.

1.1. The purpose in establishing BRLs on USAF bases is to identify the area where facilities were constructed under previous standards (exempt facilities) and eliminate waivers for other facilities constructed within this area after the lateral clearance distance standards changed in 1964. This clarifies existing policy for exempt facilities and creates new policy for new construction and land use to allow continued but controlled development without waiver. This will significantly reduce the administrative burden imposed by the airfield waiver program without increasing risk to flight or ground safety. It will allow continued growth at bases with land constraints and will continue to protect existing airspace. Use the following information to establish your BRL.

2. Establishing the BRL at a base.

2.1. Establish the BRL laterally from the runway centerline at the predominant line of facilities. The lateral line may have right angles that form indentations or pockets but must exclude all objects and/or facilities that affect existing or planned Terminal Approach and Departure Procedures (TERPS) criteria for your runway, and the 3,000 by 3,000-foot Clear Zone area. See Figure 1 for a plan view of a typical BRL.

2.2. Using the same methodology as described in 2.1, establish an elevation control line at the predominant roofline of the facilities within the area formed between the lateral BRL and the Lateral Clearance Distance boundary. This line will terminate at its intersection with the Transitional Surface, or at the base boundary, whichever occurs first. See Figure 2 for a profile view of a typical BRL.

3. Status of existing and future facilities and obstructions within the area.

3.1. All facilities beyond and beneath the control lines will be exempt from waiver and obstruction marking and lighting requirements. Waivers must be maintained for facilities or obstructions that affect TERPS criteria, and these obstructions must be marked and lighted in accordance with AFI 32-1042 and AFMAN 32-1076.

3.2. Future construction within this area is allowed only for flight-line related facilities within the following Category Groups: 11, *Airfield Pavements*; 12, *Petroleum Dispensing and Operating Facilities*; 13, *Communications, Navigational Aids, and Airfield Lighting*; 14, *Land Operations Facilities*; 21, *Maintenance Facilities*; 44 and 45, *Storage Facilities Covered, Open and Special Purpose*; 61, *Administrative Facilities*; 73, *Personnel Support*; 85, *Roadway*

*Facilities; 86, Railroad Trackage; and 87, Ground Improvement Structures.* Utilities and ancillary systems for these types of structures are authorized. See AFH 32-1084, Standard Facility Requirements Handbook, for additional information.

3.3. Existing facilities that are not within the category groups listed above may remain within the exempt zone created by establishing the BRL control lines. However, they must be relocated outside of this area when the facility is replaced.

4. Documentation and reporting.

4.1. Update base maps (E-Tabs) and the USAF Airfield Obstruction Database to exclude the items eliminated by establishing the BRL and provide the updated database to HQ AFCESA/CESC.

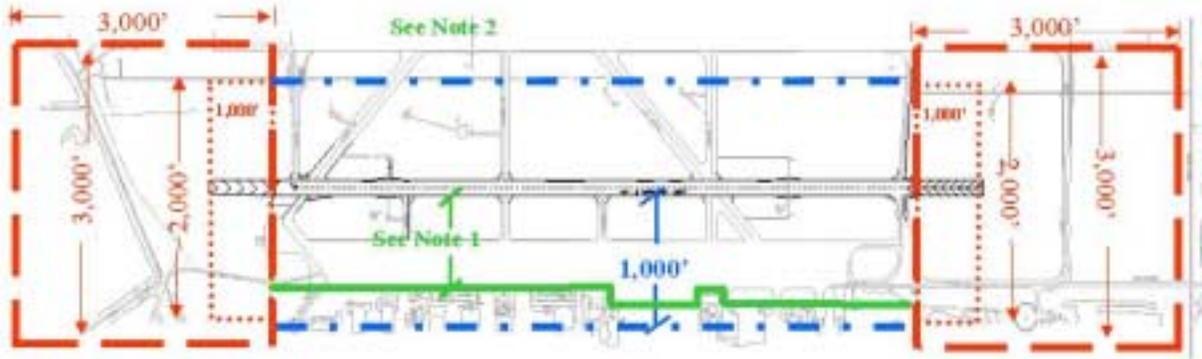
5. Implementation.

5.1. Implement these instructions as soon as possible, but not later than a date sufficient to provide the updated database to HQ AFCESA by 30 Jun 01.

6. Technical Assistance.

6.1. Direct questions to Mr. Mike Ates, HQ AFCESA/CESC, DSN 523-6351.

## Building Restriction Line (BRL) Plan View



Note 1. Distance varies. BRL to be established at the predominant line of obstructions. Establishes both lateral and elevation controls for new construction. Exclusive of Clear Zones and objects that already affect TERPS.

Note 2. No BRL established on undeveloped land. Standard USAF criteria apply for new construction.

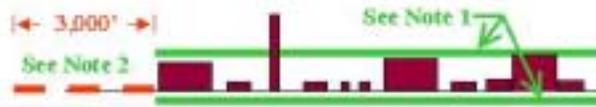
### Legend

- Clear Zone
- Graded Area of Clear Zone
- Building Restriction Line
- Primary Surface

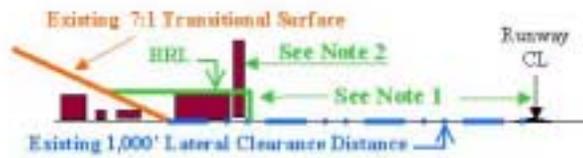
Figure 1. BRL -- Plan View.

## Building Restriction Line (BRL) Profile View

### Longitudinal Section



### Transverse Section



Note 1. BRL established at the predominant line of obstructions. Establishes both lateral and elevation controls for new construction.

Note 2. Exclusive of Clear Zones and objects that already affect TERPS.

#### Legend



Figure 2. BRL -- Profile View.